



PEOSH General Asbestos Standard

29 CFR 1910.1001

Division of Environmental and Occupational Health Services

October, 1996

The federal OSHA general industry Asbestos Standard (29 CFR 1910.1001) and construction industry Asbestos Standard (29 CFR 1926.1101) have been adopted under the New Jersey Public Employees Occupational Safety and Health (PEOSH) Act. These new asbestos standards replace the PEOSH Asbestos Standard (N.J.A.C. 12:100-12).

This information bulletin provides an overview of the general industry Asbestos Standard.

For more information on the PEOSH construction industry Asbestos Standard, obtain the PEOSH information bulletin on "Asbestos Standard for Construction."

BACKGROUND

Asbestos fibers enter the body by being breathed in or by being swallowed and can become lodged in the respiratory or digestive systems. Exposure to asbestos can cause many disabling or fatal diseases; these diseases take years to develop. Among these diseases is asbestosis, a chronic lung disease characterized by lung scarring which stiffens the lung. This interferes with normal lung function, resulting in shortness of breath, increased vulnerability to lung infections, and sometimes death. Occupational exposure to

asbestos increases the risk of lung and gastrointestinal cancer and mesothelioma. Mesothelioma is a cancerous tumor that spreads rapidly in the membranes covering the lungs and body organs.

WHAT ACTIVITIES ARE COVERED?

The standard applies to all occupational exposures to asbestos in general industry. The largest group of public employees potentially affected by this standard are brake and clutch mechanics, but this standard also covers custodial activities such as housekeeping and maintenance work.

WHAT ARE THE KEY PROVISIONS OF THE STANDARD?

- Permissible Exposure Limits
- Guidelines for Exposure Monitoring
- Regulated Areas
- Control Methods
- Respiratory Protection
- Personal Protective Clothing
- Hygiene Facilities
- Communication of Hazards
 - Information and Training
- Housekeeping
- Medical Surveillance
- Recordkeeping

WHAT ARE THE REQUIREMENTS FOR EXPOSURE MONITORING?

- The employer must assess all asbestos operations for potential generation of airborne asbestos fibers (except for brake and clutch repair where a "preferred" control method is used). Where an exposure may exceed the PEL, employee exposure measurements must be made from breathing zone air samples representing the 8-hour TWA and 30 minute EL for each employee.

- Initial monitoring also must be performed for all employees who are, or may reasonably be expected to be, exposed to airborne concentrations of asbestos at or above the PEL and/or EL unless: (1) the employer can supply historic monitoring results; and (2) the collected data demonstrates that asbestos is not being released at or above the PEL and/or EL when materials are being processed, used, or handled.

- If initial air monitoring indicates that exposures are above the PEL and/or EL, periodic monitoring must be conducted at intervals of at least every six months.

- Affected employees and their representatives must be allowed to observe monitoring and must be notified in writing within 15 working days after the receipt of the monitoring results.

WHAT DO I NEED TO KNOW ABOUT REGULATED AREAS?

- The employer must establish and set apart a regulated area wherever airborne concentrations of asbestos and/or presumed asbestos-containing material exceed the PEL and/or EL.

- No smoking, eating, drinking, chewing tobacco or gum, or applying cosmetics is permitted in regulated areas.
- Only authorized personnel may enter regulated areas. Personnel must be supplied with and are required to use an appropriate respirator.
- Warning signs must be provided and posted at all approaches to regulated areas.
- Warning labels must be affixed to all asbestos products (raw materials, mixtures, scrap) and to all containers of asbestos products, including waste containers.

WHAT CONTROL METHODS ARE IN THE STANDARD?

Where feasible, engineering and work practice controls must be used to reduce and maintain employee exposure at or below the PEL and or EL. The standard requires the employer to institute the following methods and work practices:

Methods

- Design, construct, install, and maintain local exhaust ventilation and dust collection systems according to the *American National Standard Institute Fundamentals Governing the Design and Operation of Local Exhaust Systems, ANSI Z9.2-1979*.
- Provide a local exhaust ventilation system with HEPA (high-efficiency particulate air filter) filters for all hand-operated and power-operated tools such as saws, scorers, abrasive wheels, and drills that produce or release asbestos fibers.
- Use a negative-pressure enclosure/HEPA vacuum system or a low-pressure/wet cleaning method during automotive brake and

clutch inspection, disassembly, repair, and assembly operations. An equivalent method also can be used if the employer demonstrates that the method being used achieves the required exposure reductions. (See 29 CFR Part 1910.1001 Appendix F to the standard.)

- Where no more than five pairs of brakes or five clutches are inspected, disassembled, repaired, or assembled weekly, the control methods or work practices in 29 CFR Part 1910.1001 Appendix F to the standard may be used.
- Where engineering and work practice controls have been implemented, but do not sufficiently reduce exposures to the required levels, then the employees must be provided with proper respiratory protection.
- Establish and implement a written program to reduce employee exposures by using engineering and work practice controls and by using proper respirators where the PEL and/or EL is exceeded.
- Employee rotation cannot be used as a means of compliance with the PEL and/or the EL.

Work Practices

The employer must assure that employees:

- Handle, mix, apply, remove, cut, score, or work with asbestos in a wet state to prevent employee exposure.
- Do not remove cement, mortar, coating, grout, plaster, or similar material containing asbestos from bags, cartons, or other containers that are being shipped without wetting, enclosing, or ventilating them.
- Do not sand floors containing asbestos.
- Do not use compressed air to remove asbestos or materials containing asbestos unless the compressed air is used in conjunction with a ventilation system designed to capture the dust

cloud created by the compressed air.

WHAT ARE THE RESPIRATORY PROTECTION REQUIREMENTS?

Respirators must be selected, provided, and used while feasible engineering and work practice controls are being installed; during maintenance and repair activities or other activities where engineering and work practice controls are not feasible; in work situations where feasible engineering and work practice controls are not yet sufficient to reduce exposure to or below the PEL and/or EL; and in emergencies. When respirators are used, the employer must:

- Select respirators that are approved by the Mine Safety and Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NIOSH).
- Provide a powered, air-purifying respirator in lieu of any negative-pressure respirator when the employee chooses it and when the respirator provides adequate protection.
- Develop a written respiratory program in accordance with 29 CFR 1910.134 (b), (d), (e), and (f).
- Provide employees with high-efficiency particulate air filters (99.97% effective to 0.3 microns) for appropriate respirators and assure that the filters are changed whenever an increase in breathing resistance is detected. Employees who wear respirators must be allowed to wash their faces and respirator facepieces whenever necessary to prevent skin irritation associated with respirator use.
- Assign the employee to another job or give the employee the opportunity to transfer to a different job that does not require the use of a respirator when a physician determines the employee is unable to wear a respirator. The job must be with the same seniority, status, and rate of pay, if such a position is available.

- Ensure that a respirator issued to an employee fits properly and exhibits minimum facepiece leakage. Employers must perform quantitative or qualitative fit tests at the time of initial fitting and at least every 6 months for each employee wearing negative-pressure respirators. Protocols for fit tests are found in 29 CFR 1910.1001 Appendix C of the standard.

WHAT PROTECTIVE CLOTHING IS NEEDED?

- For any employee exposed to airborne concentrations of asbestos that exceed the PEL and/or EL, the employer must provide at no cost to the employee protective clothing such as coveralls or similar full-body clothing, head coverings, gloves, and foot coverings. If the possibility of eye irritation exists, face shields, vented goggles, or other appropriate protective equipment must be provided and worn.
- Asbestos-contaminated work clothing must be removed in change rooms and placed and stored in closed, labeled containers.
- The employer must provide clean protective clothing and equipment at least weekly to each affected employee and inform the person who launders the asbestos-contaminated clothing of the potentially harmful effects of exposure to asbestos.
- Contaminated clothing and equipment must be transported in sealed impermeable bags, or other closed containers, and must be labeled.

WHAT HYGIENE FACILITIES AND PRACTICES ARE REQUIRED?

- Employees who are exposed above the PEL/EL must be provided with clean change rooms, shower facilities, and lunchrooms. Change rooms must have two separate lockers

or storage facilities (one for contaminated clothing, the other for street clothing).

- Employees must shower at the end of the shift.
- Lunchroom facilities must have a positive-pressure filtered air supply and be accessible.
- The employer must ensure that employees wash their hands prior to eating, drinking, or smoking. Smoking is prohibited in regulated areas.

WHAT COMMUNICATION RESPONSIBILITIES DO BUILDING/FACILITY OWNERS AND EMPLOYERS HAVE?

The standard requires building/facility owners and employers of potentially exposed employees to institute the following practices:

- Treat thermal system insulation and sprayed-on and troweled-on surfacing materials as asbestos-containing materials, unless analyzed and found to contain no more than 1 percent asbestos (in buildings built before 1980).
- Treat asphalt and vinyl flooring materials installed up to 1980 as asbestos-containing, unless properly analyzed and found to contain no more than 1 percent asbestos.
- Train employees who may come in contact with asbestos to handle it safely.
- Inform employers of employees performing custodial/housekeeping activities of the presence and location of asbestos-containing materials and presumed asbestos-containing materials that may have contaminated the area.
- Keep records of the presence, location, and quantity of asbestos-containing materials and presumed asbestos-containing materials present in the building for the duration of ownership and transfer these records to a successive owner.

WHAT INFORMATION AND TRAINING IS REQUIRED?

- Employers must develop a training program for all employees who are exposed to airborne concentrations of asbestos at or above the PEL and/or EL. This training must be provided prior to or at the time of initial assignment and then yearly and include information on how employees can safeguard their health.
- Employers must provide an annual awareness training course for employees who do custodial/housekeeping operations in facilities where asbestos-containing materials or presumed asbestos-containing materials are present.
- The training must include the health effects of asbestos; locations, signs of damage and deterioration of asbestos-containing materials and presumed asbestos-containing materials; the proper response to fiber release episodes; and housekeeping requirements found in the standard.
- Training must be made available to employees on work time without cost and in a clearly understandable manner.

HOW CAN TRAINING BE ARRANGED?

- Required training can be obtained through a number of sources. Consultants or other means of obtaining required training may be used, provided that the training content meets the minimum requirements and trainers meet the criteria outlined in the standard. The PEOSH Program recommends using consultants and training courses that are certified by the NJDHSS Environmental and Consumer Health Service.
- The PEOSH Program provides an overview of the Asbestos Standard. This educational

assists employers and employees in understanding the requirements of the standard.

WHAT ARE THE HOUSEKEEPING REQUIREMENTS?

- All surfaces must be kept as free as possible of accumulations of waste containing asbestos and/or asbestos dust.
- The preferred methods of cleanup are wet cleaning and/or vacuuming with HEPA filtered vacuuming equipment. Compressed air and dry sweeping must not be used.
- All spills and sudden releases of asbestos-containing materials must be immediately cleaned up.
- Sanding asbestos-containing floors is prohibited.
- Stripping of floor finishes must be conducted using wet methods and low abrasion pads at speeds lower than 300 rpm.

WHO NEEDS MEDICAL SURVEILLANCE?

- The employer must institute a medical surveillance program for all employees who are or will be exposed to airborne concentrations of asbestos at or above the PEL and/or EL.

WHAT MEDICAL SURVEILLANCE NEEDS TO BE DONE?

- All medical examinations and procedures must be performed by or under the supervision of a licensed physician.
- All medical examinations must occur at a reasonable time and place and be provided at no cost to the employee.

- Annual examinations must include a medical and work history; a complete physical examination with emphasis on the respiratory system, the cardiovascular system, and the digestive tract; a chest X-ray; pulmonary function tests; an Initial Medical Questionnaire (see 29 CFR Part 1910.1001 Appendix D, Part 1 of the standard); and any additional appropriate tests ordered by the examining physician.
- An abbreviated Periodic Medical Questionnaire (see CFR part 1910.1001 Appendix D, Part 2 of the standard) must be administered to employees who are provided periodic medical examinations.
- The employer must provide the examining physician with a copy of the standard and Appendices D and E; a description of the affected employee's duties relating to asbestos exposure; the employee's actual or anticipated exposure level; a description of personal protective and respiratory equipment used; and results of previous medical examinations.
- When the physician has completed the exam, he must supply the employer a written signed opinion that includes the medical examination results, whether the employee has any medical conditions that would place the employee at an increased risk from exposure to asbestos; any recommended limitations on employee use of personal protective equipment, a statement that the employee has been informed of their examination results, and a statement that the employee has been informed of the increased risk of lung cancer due to the combined effect of smoking and asbestos exposure.
- The physician is not to reveal to the employer specific findings or diagnoses unrelated to occupational asbestos exposure.
- The employer must provide a copy of the physician's written opinion to the affected employee within 30 days of its receipt.

WHAT RECORDS NEED TO BE KEPT?

- The employer must keep employee asbestos exposure records for 30 years.
- Medical surveillance records must be kept for the duration of employment plus 30 years.
- Employee training records must be kept for one year beyond the last date of employment.
- Building and facility owners are required to keep records about the presence, location, and quantity of asbestos containing material and presumed asbestos-containing material in the building and/or facility. These records must be kept for the duration of ownership and must be transferred to the subsequent owners.

WHEN DOES THE STANDARD GO INTO EFFECT?

The standard was published in the New Jersey Register on August 5, 1996. The effective date is August 5, 1996. All obligations of this standard begin on the effective date except as follows:

Exposure monitoring	February 5, 1997
Regulated areas	February 5, 1997
Respiratory protection	February 5, 1997
Hygiene and lunchroom facilities	June 5, 1997
Employee information and training	February 5, 1997
Medical surveillance	February 5, 1997
Written compliance program	February 5, 1997
Methods of compliance	February 5, 1997

**FOR MORE INFORMATION,
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This information bulletin provides an overview of the New Jersey PEOSH General Asbestos Standard. Consult the standard itself for complete information. Information used in this bulletin was obtained from federal Occupational Safety and Health Administration publications.

**PEOSH PROGRAM
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***PEOSH General Asbestos Standard
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